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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,795	03/31/2008	Olaf Binkle	P8260US(PCT)	9699

20469 7590 08/05/2011  
KOHLER SCHMID MOEBUS  
RUPPMANNSTRASSE 27  
D-70565 STUTTGART,  
GERMANY

EXAMINER
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WEISZ, DAVID G

ART UNIT	PAPER NUMBER
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1777

MAIL DATE	DELIVERY MODE
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08/05/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/565,795	<b>Applicant(s)</b> BINKLE ET AL.	
	<b>Examiner</b> DAVID WEISZ	<b>Art Unit</b> 1777	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 10-16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-16 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Acknowledgement is made of amendments filed 6/14/11. Claims 1-9 and 17 are canceled. Claims 10-16 and 18 are pending and presented for examination.

### ***Response to Amendment***

2. In response to the amendments filed 6/14/11, the examiner modifies the grounds for rejections. The 35 U.S.C. 112, second paragraph, rejections have been withdrawn. The 35 U.S.C. 103(a) rejections have been modified.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. **Claims 10-11, 13-16 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nohren (US 6193886) (Nohren) in view of Zhou et al. (US 6102994) (Zhou).

Regarding claims 10 and 18, Nohren discloses a ceramic filter element for cleaning water, the element comprising:

a housing (Figure 1), said housing defining a water Inlet, a water outlet, and a cleaning outlet; a tubular body disposed within said housing (Figure 1), said tubular body having at least one wall and at least one through opening extending along an entire length of said tubular body (Figure 4), said at least one wall structured and dimensioned as at least one of a functional layer and as a carrier having a functional coating (see "coating", abstract), said tubular body having an open first end communicating with said inlet and an open second end; and a closure member, sealing said cleaning outlet and closing said open second end of said tubular body (Figure 1), wherein water to be filtered flows under pressure from an outer surface into said through opening or from an inner surface of said through opening to an outer surface of the filter element (see Figure 1, "pressure", abstract), wherein the ceramic filter element is formed from a porous ceramic carrier (see "pore size" and "ceramic", abstract).

However, the reference does not specifically disclose that the filter element is coarse-

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pored and that the coating is a fine-pored functional ceramic coating. However, the reference does disclose that the pore size can vary depending on the biological material to be filtered (see Col1/L44-63). As the type of biological material to be filtered is a variable that can be modified by adjusting the pore size, the precise pore size would have been considered a result effective variable. As such, without showing unexpected results, one having ordinary skill in the art would have optimized the pore size of Nohren by routine experimentation (In re Boesch, 617 F.2d. 272, 205, USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (In re Aller, 105 USPQ 223). However, the reference does not specifically disclose the coating to be a ceramic coating. The reference does disclose that, ideally, the coating is hydrophilicity enhancing.

Zhou discloses a biocidal coating that is porous and ceramic-based (see "biocidal" and "ceramic-based", abstract). Further, the reference discloses that the coating of Zhou has improved hydrophilicity (see "without decreasing the hydrophilicity", Col2/L3). Thus, it would have been obvious to one having ordinary skill in the art to use the coating of Zhou for the coating of Nohren, as it exhibits enhanced hydrophilicity.

Regarding claim 11, Nohren discloses that the filter element is rod-shaped (see Figure 4) and has multiple through openings (see "plurality of different tubes or cores" and "as opposed to the single tubular or core element", Col6/L40-44).

Regarding claim 13, Nohren discloses that the filter element is enclosed by an activated carbon filter element (see "activated carbon", Col6/L25-30).

Regarding claim 14, Nohren discloses that the filter element constitutes a filtering drinking straw (see "straw", abstract).

Regarding claims 15-16, Nohren discloses that the housing is formed in multiple parts from a housing cover and a housing body, wherein individual housing parts are removably connected to each another in a liquid-tight manner (see "operative connection" and "positive liquid seal", Col6/L8-22).

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5. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Nohren in view of Zhou as applied to claims 10-11, 13-16 and 18 above, and further in view of Sawan et al. (US 5681468, previously referenced) (Sawan).

Nohren in view of Zhou do not specifically disclose that the ceramic filter element comprises a sintered ceramic.

Sawan discloses a ceramic filter element coated with a biocidal coating (see abstract). Further, the reference discloses that the filter may be made of any number of materials, including sintered ceramic blocks (see "sintered ceramic", Col6/L1-10). It would have been obvious to one having ordinary skill in the art to make the filter of Nohren in view of Zhou out of conventional materials, including sintered ceramic as disclosed by Sawan.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 10-16 and 18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID WEISZ whose telephone number is (571)270-7073. The examiner can normally be reached on Monday - Thursday, 7:30 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571)272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

8/3/2011

/Yelena G. Gakh/  
Primary Examiner, Art Unit 1777

/D. W./  
Examiner, Art Unit 1777